



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

409 3rd Street, SW, Suite 300
Washington, DC 20024

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 21, 2007

Mr. James Baggs
Vice President Field Operations & Engineering
TransCanada Pipeline Company
450 1 Street SW
Calgary, Alberta, Canada T2P 5H1

CPF 1-2007-1003M

Dear Mr. Baggs:

On June 6-8 and June 20-22, 2006 representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the State of Washington as interstate agent, pursuant to Chapter 601 of 49 United States Code inspected TransCanada's procedures for integrity management in Calgary, Alberta, Canada.

On the basis of the inspection, PHMSA has identified the apparent inadequacies found within TransCanada's plans or procedures, as described below:

1. SCCDA Data Gathering & Evaluation

§192.911 What are the elements of an integrity management program?

- (d) A direct assessment plan, if applicable, meeting the requirements of §192.923, and depending on the threat assessed, of §§192.925, 192.927, or 192.929.

§192.907 What must an operator do to implement this subpart?

(a) General. No later than December 17, 2004, an operator of a covered pipeline segment must develop and follow a written integrity management program that contains all the elements described in CFR:192.911 and that addresses the risks on each covered transmission pipeline segment. The initial integrity management program must consist, at a minimum, of a framework that describes the process for implementing each program element, how relevant decisions will be made and by whom, a time line for completing the work to implement the program element, and how information gained from experience will be continuously incorporated into the program. The framework will evolve into a more detailed and comprehensive program. An operator must make continual improvements to the program.

§192.929 What are the requirements for using Direct Assessment for Stress Corrosion Cracking (SCCDA)?

(b) General Requirements. An operator using direct assessment as an integrity assessment method to address stress corrosion cracking in a covered pipeline segment must have a plan that provides, at minimum, for –

(1) Data gathering and integration. An operator's plan must provide for a systematic process to collect and evaluate data for all covered segments to identify whether the conditions for SCC are present and to prioritize the covered segments for assessment. This process must include gathering and evaluating data related to SCC at all sites an operator excavates during the conduct of its pipeline operations where the criteria in ASME/ANSI B31.8S, Appendix A3.3 indicate the potential for SCC. This data includes at minimum, the data specified in ASME/ANSI B31.8S, Appendix A3.

- Item 1A: §192.907(a), §192.911(d) and §192.929

No SCC assessments have been performed on HCAs. TransCanada has identified SCC as a threat of concern and has included SCCDA as a necessary assessment method in the baseline assessment plan. An SCCDA framework does not exist although TransCanada was able to provide a presentation and discuss the details of its planned approach. As described in 192.907, an integrity management framework, including an SCCDA framework plan, is required to describe how an operator addresses each element of an integrity management program, and their plans for how they intend to improve these processes to reach a fully-developed integrity management program as would be required prior to implementation of SCCDA activities.

2. Continual Evaluation and Assessment

§192.911 What are the elements of an integrity management program?

(f) A process for continual evaluation and assessment meeting the requirements of §192.937.

§192.937 What is a continual process of evaluation and assessment to maintain a pipeline's integrity?

(b) Evaluation. An operator must conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment. The periodic evaluation must be based on a data integration and risk assessment of the entire pipeline as specified in §192.917. For plastic transmission pipelines, the periodic evaluation is based on the threat analysis specified in 192.917(d). For all other transmission pipelines, the evaluation must consider the past and present integrity assessment results, data integration and risk assessment information (§192.917), and decisions about remediation (§192.933) and additional preventive and mitigative actions (§192.935). An operator must use the results from this evaluation to identify the threats specific to each covered segment and the risk represented by these threats.

• Item 2A: §192.911(f) and §192.937(b)

TransCanada has not defined procedure and process requirements, including responsibilities, required steps, and documentation requirements for the conduct of periodic evaluation and assessment that are based on data integration and risk assessment of the entire pipeline as required by 192.937(b). TransCanada's continual evaluation and assessment program does not include key program steps to address:

- a. past and present assessment results,
- b. data integration and risk assessment information,
- c. decisions about remediation, and
- d. additional preventive and mitigative actions

The IMP process for conduct of periodic evaluation and assessment lacks the detail expected for a mature developed integrity management program. A mature program must include complete, well-documented, and effectively implemented processes for all implemented integrity management program elements. Complete documentation for periodic evaluation conducted in early 2006 to re-establish the baseline assessment plan was not available for review.

3. Preventive and Mitigative Measures

§192.911 What are the elements of an integrity management program?

(h) Provisions meeting the requirements of §192.935 for adding preventive and mitigative measures to protect the high consequence area.

§192.935 What additional preventive and mitigative measures must an operator take?

(a) General Requirements. An operator must take additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate

the consequences of a pipeline failure in a high consequence area. An operator must base the additional measures on the threats the operator has identified to each pipeline segment. (See §192.917.) An operator must conduct, in accordance with one of the risk assessment approaches in ASME/ANSI B31.8S, Section 5, a risk analysis of its pipeline to identify additional measures to protect the high consequence area and enhance public safety. Such additional measures include, but are not limited to, installing Automatic Shut-off Valves or Remote Control Valves, installing computerized monitoring and leak detection systems, replacing pipe segments with pipe of heavier wall thickness, providing additional training to personnel on response procedures, conducting drills with local emergency responders and implementing additional inspection and maintenance programs.

(b) Third Party Damage and Outside Force Damage.

- i. **Third party damage.** An operator must enhance its damage prevention program, as required under §192.614 of this part, with respect to a covered segment to prevent and minimize the consequences of a release due to third party damage. Enhanced measures to an existing damage prevention program include, at a minimum-
- ii. **Using qualified personnel** (see §192.915) for work an operator is conducting that could adversely affect the integrity of a covered segment, such as marking, locating, and direct supervision of known excavation work.
- iii. **Collecting in a central database information** that is location specific on excavation damage that occurs in covered and non covered segments in the transmission system and the root cause analysis to support identification of targeted additional preventative and mitigative measures in the high consequence areas. This information must include recognized damage that is not required to be reported as an incident under Part 191.
- iv. **Participating in one-call systems** in locations where covered segments are present.
- v. **Monitoring of excavations** conducted on covered pipeline segments by pipeline personnel. If an operator finds physical evidence of encroachment involving excavation that the operator did not monitor near a covered segment, an operator must either excavate the area near the encroachment or conduct an above ground survey using methods defined in NACE RP-0502-2002 (ibr, see §192.7). An operator must excavate, and remediate, in accordance with ANSI/ASME B318.S and §192.933 any indication of coating holidays or discontinuity warranting direct examination.
- vi. **Outside force damage.** If an operator determines that outside force (e.g., earth movement, floods, unstable suspension bridge) is a threat to the integrity of a covered segment, the operator must take measures to minimize the consequences to the covered segment from outside force damage. These measures include, but are not limited to, increasing the frequency of aerial, foot or other methods of patrols,

adding external protection, reducing external stress, and relocating the line.

- **Item 3A: §192.911(h) and §192.935(a)**

TransCanada has not defined procedure and process requirements, including responsibilities, required steps, and the elements required for documentation for the identification of additional preventive and mitigative measures based on both the identified threats to each pipeline segment and the risk analysis as required by 192.935.

- **Item 3B: §192.911(h) and §192.935(a)**

TransCanada procedure TED-INT-MIT does not include decision making criteria for conduct of preventive and mitigative measures analyses and does not specify the expected analysis documentation requirements.

- **Item 3C: §192.911(h) and §192.935(b)**

TransCanada indicated that it had identified the need to conduct more frequent aerial patrols due to the threat of outside force damage, its P&M Measures process, and proximity to high population areas. However, TransCanada was unable to show how its P&M Measures process resulted in this decision. Note: the issue of the effectiveness of a single person conducting aerial patrols was brought to the attention of GTN's Compliance Coordinator during the last 2 WUTC inspections. This concern has not been resolved and was brought to the attention of TransCanada for investigation.

4. Management of Change

§192.911 What are the elements of an integrity management program?

(k) A management of change process as outlined in ASME/ANSI B31.8S, Section 11.

- **Item 4A: §192.911(k)**

TransCanada Process for documenting BAP changes does not include provisions for the analysis of the implications of changes. This concern was addressed during the inspection as IMP Section 9.7.1 was updated to require that changes be managed in accordance with IMP Chapter 15 for Management of Change. IMP Section 15.4.6 requires that MOCs under go a technical review and impact analysis of any proposed change.

- **Item 4B: §192.911(k)**

TransCanada referred to IMP Section 15.4.2 for process step to address new information. IMP Section 5.5.2 also requires that data be updated within one year. IMP Section 5.5.2 indicates that TransCanada has identified appropriate sources of information and has acquired/collected data, or has developed plans to acquire additional data to address data gaps. All data collected is to be integrated into the TransCanada ORION database. New information or data received will be incorporated into the integrity management program within one year of its integration/documentation. IMP Section 15.4.2 states that employees are trained to recognize potential changes or factors that should prompt a change requiring the use of the MOC process. Details of TransCanada IMP program requirements and responsibilities are lacking and have not been defined that address how new information is incorporated into the risk assessment in a timely and effective manner.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. **Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b).** If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

If, after opportunity for a hearing, your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.237). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within one hundred twenty (120) days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

In correspondence concerning this matter, please refer to **CPF 1-2007-1003M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark F. Wendorff". The signature is fluid and cursive, with a prominent flourish at the end.

Mark F. Wendorff
Acting Director, Eastern Region
Pipeline and Hazardous Materials Safety Administration

Enclosure: *Response Options for Pipeline Operators in Compliance Proceedings*